

November 2015

ELECTRONIC KITS AND PROJECTS



JAMECO[®]
ELECTRONICS

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FEATURED PRODUCTS



Build a Desktop Speaker Amplifier System

NEW
MARKED IN PINK

Project Amp by EEME.CO is a disassembled project kit to build and learn about a speaker amplifier system. With Project Amp's online video curriculum, your family will not only assemble the kit, but also learn how the amplifier system works. Plug a music player into Project Amp and play your favorite tunes. Absolutely everything – parts, tools, wires, breadboard, batteries, etc. – is included in the kit. Project Amp is no small project – in concepts learned, physical size, and volume! It's 12.5" x 6.5" x 6.5", sports two 4" speaker drivers, sits prominently on any desk, and can be cranked up LOUD!



Part No.	Description	Exp. Level	Price
2259850	EEME.CO Project Amp speaker amp kit	Beginner	\$189.95

Over 40 Audio Kits available online. Use Web Code: AAK



Holiday Themed LED Kits

Velleman offers a variety of soldering kits for all ages and experience levels. You can teach kids to solder, make your own digital winter wonderland or challenge yourself with a kit that uses only surface mount components. These LED kits are sure to light up your night.

Part No.	Mfr. Part No.	Description	Exp. Level	Price
147635	MK100	16 LED Christmas tree	BEG	\$7.95
211781	MK130	16 LED 3D Christmas tree	BEG	10.95
2196502	MK142	6 LED SMD Christmas tree	BEG/INT	11.95
2128286	MK172	60 LED VU-meter flashing star	BEG/INT	27.95
2150694	MK183	7 LED SMD USB Christmas tree	INT	19.95
236072	MK117	134 LED Blinking Christmas tree	INT	30.95
2128278	MK170	30 LED multi-effect flashing star	INT	31.95
211764	MK116	126 LED Santa riding sleigh	INT	32.95

Over 450 Electronic Kits available online. Use Web Code: EKS

Grove Starter Kit for Arduino

Grove is a modular system of sensors and devices with standardized connectors for simple connecting so you can easily sense motion, do physical or environmental monitoring, communicate wirelessly, or interact with your creation.

Includes: Base Shield, guide book with stickers, 15 connecting cables and one each of buzzer, sound, rotary encoder, touch, light, vibrator, relay, temperature, magnetic switch, switch, button, servo and three LED modules.



Part No.	Description	Exp. Level	Price
2217473	Grove Starter kit for Arduino	Beginner	\$59.95

20 more Starter Kits available online. Use Web Code: SKS



J-Bot v2.0: The Customizable Do-It-Yourself Robot



Build a robot that can roam around freely without supervision. With the included PING))) ultrasonic sensor, the J-Bot can detect objects in its way and drive around them all by itself. Just assemble the motor control shield and hook up your Arduino Uno microcontroller (not included) and you're ready to program this little robot to perform any of your commands.

Part No.	Mfr. Part No.	No. of Pieces	Exp. Level	Price
2140285	J-BOT	75+	Intermediate	\$149.95

Over 100 Robotic Kits available online. Use Web Code: ERK

Additional products, availability and specifications visit Jameco.com and enter the Web Code in the product search box

Spark Your Electronics Fire

This catalog is packed with ideas to help you get excited about your next project. Hobbyists tell us over and over again about the thrill of completing an electronics project. The journey that starts with an idea, typically involves some struggle and ends with delightful gratification as a creation comes to life; it's what makes this hobby great. This catalog is a diverse collection of electronics kits and accessories to help spark that electronics fire in hobbyists of any skill level.



All kits come with step-by-step instructions and cover an array of interest levels including robotics, alternative energy, networking, lighting, power, motors, audio, testing and more. We're proud to provide the most electronics kits in the industry.

You'll find kits from popular brands such as Velleman, OWI-Robot, Dagu, and Evil Mad Science. This catalog also features the best Club Jameco kits where members design kits and earn a commission on every sale. So what are you waiting for? Light your electronics fire and order a new kit today.

Electronic Kits Superstore

Jameco has the largest collection of electronic kits in the industry. That's why we've created the first ever Electronic Kits Mall. Browse different stores to easily find what most interests you. There are stores for Arduino, Lighting, Alternative Energy, 3D products and more. Visit www.Jameco.com/KitMall and take a look at just how many kits we have in store.



Club Jameco



Club Jameco is one of a kind electronics hobby club where anyone can pitch a project idea or design an electronic kit. When a project is completed and approved, Jameco kits it, promotes it, sells it and pays a commission to the designer on every sale. If you have an idea for a great kit but are not sure how to go about building it, you can post a comment on the Club Jameco Whiteboard and connect with other Jameco community members. Find out everything you need to know at ClubJameco.com.

Catalog Tools

On Jameco.com, you'll find more electronic kits, more product information, and the latest pricing and availability information. Jump seamlessly from catalog to Web using Web Codes.



Enter the Web Code in the product search box
Club Jameco Kits — Web Code CJK

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Electronic Kits

ELENCO® 3½-Digit Deluxe Digital Multimeter Kit

Finally a kit that doesn't just sit and look pretty. The DMM kit is sure to excite and give you a sense of personal satisfaction. With AC/DC voltage and current measurement, diode test, resistance, transistor hFE and capacitance measurement, you'll have built a popular and useful piece of test equipment!

- DC Voltage: 200mV-1000V
- AC Voltage: 200mV-750V
- Resistance: 200Ω-20MΩ
- Max reading of 1999
- 1 pair safety test leads
- Capacitance: 2nF-200μF
- Transistor hFE: NPN, PNP
- 3.5 LCD 0.9" height
- DC/AC Current: 200μA-20A

Part No.	Mfr. Part No.	No. of Pieces	Experience level	Price
2181343	M-266K	135	Intermediate	\$42.95

Additional products, availability and specifications visit Jameco.com and enter the Web Code in the product search box



EM4 4-in-1 Robot 2128724



RFID Proximity Card 2123936



Terrain Tracked Robot 2128331



Robotic Arm 2095023

Web Code: ERK

Robotic and Computer Control Kits

Visit www.Jameco.com/ElectronicKitsZone for all electronic kits

Part No.	Mfr. Part No.	Description	No. of Pieces	Exp. Level	Price
242923	21-601	Mechanical Wooden Tyrannosaurus: Wooden parts, motors & gears	116	●	\$14.95
2218724	OWI-891	EM4 4-in-1 Educational Robot: Build a cricket, a beast, trailer truck or Grandpa-bot.	32	●	19.95
2111960	535-USB	USB controller interface for Robotic Arm Edge (P/N 2095023)	1	●	39.95
2150619	RS014-USB	2-in-1 Mini Robots: Infrared compound eye, servos & remote	22	●	59.95
200328	MK127	Light-Following Running Micro Bug: Adjustable sensitivity and LED eyes	26	■	11.95
200336	MK129	Light-Seeking Crawling Micro Bug: Adjustable sensitivity and LED eyes	29	■	14.95
386708	21-880	Line Tracking Robot Mouse: Endlessly follows a black line	130	■	22.95
386610	21-886	Terrain Escape Robot: Infrared emitting diode & receiver module	86	■	22.95
358352	75020	Line Tracing Snail Robot: Detects a black line with LEDs	40	■	39.95
239476	K2633	Relay Card kit: Control up to 4 high-power circuits. 15A @ 125VAC	29	■	19.95
2130600	K8015	Multi-function Relay Switch: 14 functions & pushbutton control	37	■	24.95
2130491	K4305	20-LED Stereo VU Meter. -20dB to +3dB, 10-15VDC/0.25A input	45	■	32.95
2123936	MK-179	RFID Proximity Card Reader: 2 tags & EM4100 compatible	52	■	29.95
2128374	21-531N	Titan Tank: Infrared remote control, 4-ch selection for battle	121	■	36.95
2128331	OWI-536	3-In-1 All Terrain Robot: Transforms to a forklift, rover or gripper	120+	■	49.95
2095023	OWI-535	Robotic Arm Edge: Rotates 270°, lifts 100g., 12.6" reach	87	■	49.95
2136403	975	3pi Robot: Gear motors, sensors, LCD & ATmega328 microcontroller	1	■	99.95
2140285	J-BOT	Customizable Robot: Ultrasonic sensors, 4WD platform & MotorShield	22	■	149.95
2157124	J-Bot v2	Customizable Mobile Robot: Ultrasonic sensor, 4WD chassis & Romeo	17	■	159.95
2157116	258	Egg-Bot Deluxe: Open-source robotic arm draws on spheres	126	■	199.95
2190101	RS032	Playful Puppy Quadruped Robot: Arduino compatible	85+	■	149.95



Mr. General Robotic Platform

A great kit for those new to robotics but still want a challenge. Breadboard circuits mean no soldering! Prototyping space is ready when you are for custom circuits.

- Arduino-compatible
- IR compound eye to track movement



Part No.	No of Pieces	Experience Level	Price
2150580	206	Intermediate	\$59.95



Function Generator Kit

Build a basic circuit for a sine, square and triangle wave generator with high stability and accuracy. Frequency and amplitude tuning.

- Frequency: +1 to 100 KHz in 4 ranges
- Use +12 VDC or ±6 VDC supply (see Web)
- Based on Exar XR2206 IC



Part No.	No of Pieces	Experience Level	Price
20685	21	Intermediate	\$29.95

● = Beginner ■ = Intermediate ◆ = Expert

Test, Measurement & LED Kits



Brain Game 2136999



Shaking Dice 2136802



Larson Scanner 2136534



Roulette Kit 2137191

Test and Measurement Kits

Visit www.Jameco.com/ElectronicKitsZone for all electronic kits

Part No.	Mfr. Part No.	Description	Web Code: TMK	No. of Pieces	Exp. Level	Price
2136930	MK105	Signal Generator, sine, triangle, square wave. 1KHz fixed frequency		30	●	\$8.95
662725	EBLOG-300A	3V-16VDC Logic Probe: Detect pulse signals & monitor digital circuits		14	●	11.95
129091	K7102	Metal Detector: LED proximity indicator and adjustable sensitivity		22	■	18.95
20685	JE2206	Function Generator: 1-100kHz 4 range, sine, square and triangle		21	■	29.95

Distance and Light Kits

Visit www.Jameco.com/LightZone for all LED kits and products

Part No.	Mfr. Part No.	Description	Web Code: DLK	No. of Pieces	Exp. Level	Price
2131207	MK135	Electronic Decision Maker: Rapidly flashes lights to stop at one.		19	●	\$7.95
147635	MK100	Flashing Christmas Tree: 16 LEDs consumes 4mA max.		30	●	7.95
2136999	MK112	Electronic Brain Game: Just like Simon Says. 4 skill levels.		28	●	10.95
2130933	MK147	Dual white LED stroboscope creates a powerful flash effect.		21	●	8.95
147555	MK101	Flashing LED Sweetheart: Flashes 25 T1 (3mm) red LEDs.		46	●	9.95
236081	MK145	Halloween Pumpkin: 25 LEDs flash to simulate a flickering candle.		71	●	14.95
2130802	MK150	Shaking Dice: Shake and LEDs will automatically light a value.		23	●	14.95
157964	LED1007	IR Illuminator: 36 high power IR LEDs 940nm/20° viewing angle.		41	●	13.95
2136534	091	Larson Scanner: Create LED effects from Battlestar Galactica.		22	●	15.95
2136542	080	Deluxe Menorah: (9) 10mm LEDs, press button to light another candle.		28	●	16.95
2128286	MK172	60 LED Sound Star: "VU-meter" flash to audio with built-in microphone.		113	●	27.95
2137191	MK119	Game of Roulette: 37 LEDs, spinning sound and tune for each color.		66	●	24.95
177092	IR-10	Infrared Transmitter & Receiver: Transmit 40kHz modulated IR to 6-8".		26	●	24.95
211764	MK116	Santa Sleigh and Reindeer: 126 LEDs flash to make a moving visual.		201	●	32.95
2128278	MK170	60 LED Star: 24 flashing patterns, static, blinking, animations with fade.		94	●	31.95
2150694	MK183	USB Surface Mount Christmas Tree: 7 bright SMD LEDs.		27	■	19.95
200310	MK124	Scrolling Message: 16 characters scroll over 35 LED display.		76	■	21.95
147643	K4304	10-LED Mono VU Meter: Adjustable input and light bar display.		36	■	23.95
236072	MK117	Deluxe Christmas Tree: 134 LEDs simulate blinking candles.		208	■	30.95
2136551	800820	Meggy Jr. RGB: Handheld pixel-scale video game. 8x8 RGB matrix.		80	■	84.95

SMD Happy Face Solder Kit

Put a smile on your face while assembling this flashy LED gadget that uses surface mounted components.

- 2 red LEDs flash alternately
- Includes a few extra (tiny) parts
- Use a CR2025 or CR2032 battery (sold separately, P/N 14162)



Part No.	No of Pieces	Experience Level	Price
2196490	12	BEG / INT	\$10.95

3x3x3 Red 3D LED Cube

Challenging, yet dazzling. After assembly, animations can be user programmed via USB and downloadable software (for PC).

- Divide animations into multiple scenes
- Up to 234 animation frames
- 102 frames preprogrammed (rain, snake, etc.)



Part No.	No of Pieces	Experience Level	Price
2187340	82	BEG / INT	\$32.95

Additional products, availability and specifications visit Jameco.com and enter the Web Code in the product search box

The Original Deluxe Edition Egg-Bot Kit

The Eggbot is an open-source art robot that can draw on spherical or egg-shaped objects from roughly 1.25" to 4.25" in diameter. The EggBot is very adjustable and is designed to draw on all kinds of things that are normally "impossible" to print on such as Ping Pong balls, light bulbs or ornaments. The GUI works on Mac, Windows and Linux. The pen holder fits various art pens like Sharpie Ultra Fine Point pens. Includes precision egg coupler, 5/64" ball driver and brass hardware upgrades.

- 16x microstepping driver with 200 step/revolution motors for 3200 step/revolution resolution on each axis.



Part No.	Mfr. Part No.	Experience Level	Price
2157116	258	Intermediate	\$199.95



Timing & Power Kits

Build a Simple DC Electric Motor

JAMECO

KitPro

Web Code: PSM

Learn how to make a basic DC electric motor with a D-cell battery, magnet wire, a magnet and paperclips (not supplied) to explore the fundamentals of electromagnetism. With the classroom bundle (for up to 20 students), builders should be encouraged to go a little off script to create a topic of discussion. What happens with a bigger coil, or a smaller coil with more windings? What effect would adding more magnets or power have?



Part No.	Description	Experience Level	1	5
2192296	Simple DC Motor - single motor kit	Beginner	\$14.95	\$13.49
2192309	Simple DC Motor - parts for 20 motors	Beginner	99.95	89.95

Additional products, availability and specifications visit Jameco.com and enter the Web Code in the product search box





LED Clock 2217078



Bulb Dial Clock 2136569



Voltage Regulator 2115750



DC Pulse Width 120539

Time and Clock Kits

Web Code: TCK

Part No.	Mfr. Part No.	Description	No. of Pieces	Exp. Level	Price
2170839	264	DS1307 Real Time Clock Breakout Board. Integrate time into projects.	8	●	\$11.95
2157079	MTRTC001	ChronoDot Real Time Clock module (DS3231SN) temp. compensated.	4	●	18.95
2187323	MK188	1 second to 60 hour pulse-pause timer. Relay: 16A maximum.	30	●	26.95
2130520	VM141	Start-Stop Timer with wide timing range, easy setting & LED animation.	40	●	37.95
2217078	JE270	8-Digit LED Clock. Arduino-compatible. Buttons cycle thru 5 included modes.	50	■	79.95
2136569	950+966	Shadow clock with multiple LEDs to mark hours, minutes and seconds.	147	■	89.95

Power Supply and Motor Kits

Web Code: PSM

Part No.	Mfr. Part No.	Description	No. of Pieces	Exp. Level	Price
2115750	34020	Breadboard Voltage Regulator: 6-18Vin, 5V @ .5A out, 2.1mm jack	12	●	\$8.95
181833	VM-1	DC Voltage Monitor: LED displays monitors 12VDC in 1V, 1/2V or 1/4V steps	46	●	9.95
2184229	815	16-Ch.12-bit PWM/servo driver with I ² C interface. Daisy-chain: 62 modules.	7	●	17.95
117621	K1823	1.5A @ 1.5-35VDC Power Supply: Max input: 28VAC or 4VDVC.	12	■	13.95
2137166	K8042	Symmetric 1A Power Supply: Output of 1.2-18VDC	46	■	19.95
20626	JE215	Dual Output Adjustable Regulated Power Supply: ±5 to ±15VDC	48	■	29.95
127829	GMC-1102	Motor Speed Control: Pulse width modulation to vary speed of motor	35	■	49.95
358248	70097	Twin Motor Gearbox: 58:1 & 203:1, 3mm hex shaft. RPM: 230,65.	61	◆	12.95
120539	K8004	DC Pulse Width: Proportional DC to PWM 0-100%. Op. voltage: 8-35VDC.	40	◆	26.95

Velleman Parking Radar Kit

Want a high-tech alternative to the tennis ball on a string in your garage? Use ultrasonic pulses to generate an audible signal when a set distance is crossed.

- Adjustable range: 2" - 23"
- 2 piece design; sensor unit, sound unit
- 12V supply recommended (screw terminal)



Part No.	No of Pieces	Experience Level	Price
129120	55	Intermediate	\$39.95

Visit the Mall of Electronic Kits – www.Jameco.com/KitMail

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KitPro

Pocket Power Supply Kit

Never buy another dud electronic gadget from a garage sale. With this handy power supply, you'll have a selectable 1.5V to 6V with alligator clip output.

- 1.5V, 3V, 4.5V and 6V
- Uses a DIP switch to select voltage output
- Red power on indicator



Part No.	No of Pieces	Experience Level	Price
2204197	15	Beginner	\$17.95

● = Beginner ■ = Intermediate ◆ = Expert

Audio & Mobile Chassis Kits



Infrared Light Barrier 2131012



Sound Generator 2130870



5-in-1 Kit 2259534



Tracked Chassis 2143865

Audio Transmitters, Amplifier, Sound Generator and Detection Kits

Part No.	Mfr. Part No.	Description	Web Code: AAK	No. of Pieces	Exp. Level	Price
2136956	MK104	Electronic Cricket: Activated by darkness. Tone & light sensitivity.		25	●	\$7.95
2131012	MK120	Infrared Light Barrier: 85dB audible alarm and visible LED alert.		46	●	11.95
2130984	MK136	Super Stereo Ear audio amplifier boosts sound up to 50 times louder.		35	●	11.95
2130731	MK171	Voice Changer: Effects with robotic, vibrato & high-low effects.		36	●	12.95
2130870	MK113	Siren Sound Generator: 4 sounds, pitch adjustment potentiometer.		17	●	13.95
2123944	MK-182	Digital Echo Chamber: Echo effect, line-in & out, output 8Ω, 500mW		63	●	24.95
147571	MK103	Voice Activated Kit: Sound activates 4 flashing LEDs.		33	■	6.95
662670	EBST-11	1W Audio Stereo Amp.: Add a parabolic reflector and hear blocks away.		32	■	11.95
117612	K1803	Universal Mono Pre-Amp: 1kΩ and 40dB adjustable output level.		17	■	10.95
2211899	K8066	3-Watt Mono Amp.: Small but powerful for a wide range of applications		13	■	11.49
127255	K4001	7-Watt Amplifier: Music output power: 7 watts, 4Ω		22	■	15.95
211772	MK118	FM Radio: 88-108MHz, on/off switch, volume control & LED indicator.		65	■	29.95
151239	FMST-100	FM Stereo Transmitter Mini: Transmit audio source wirelessly up to 150'.		37	■	32.95
129138	K4003	30W Stereo Power Amp.: Max out: 2 x 15W/4Ω or 2 x 10W/8Ω. 0.07% THD.		38	■	32.95
127562	K4401	Sound Generator: 10 sounds, machine gun, Euro siren & "snake charmer"		61	■	39.95
2120815	K8098	Audio Analyzer: Display EMS/peak power, mean/peak dB & audio spectrum		73	◆	69.95
2120823	K8095	MP3 Player: Create jukebox, sound effects, MP3 and more!		100	◆	89.95

Miscellaneous Electronic Kits

NEW
MARKED IN PINK

Part No.	Mfr. Part No.	Description	Web Code: ERK	No. of Pieces	Exp. Level	Price
358299	70100	Tank Track & Wheel set: 3 track lengths, idler, sprocket & road wheels		40	●	\$9.95
2119734	C-9701	20 second voice recorder: Output: 0.5 - 2W/8Ω speaker		Assembled	—	14.95
2161617	SP-1A	Learn to Solder Siren kit. 25W iron and wire cutters not included.		23	●	10.95
2124218	MKEL4	Learn to Solder Siren kit. 25W iron and wire cutters included.		25	●	18.95
2259534	TE-5	5-in-1 kit. Learn basic electronics while building five simple projects.		35	●	19.95
2124200	FO-30K	Learn fiber optics. Transmit your voice or signal thru a fiber optic cable.		56	●	24.95
2143865	ROV5-1	Rover 5 Tracked Chassis: Adjustable, max speed 10 in/sec., 87:1 gears		5	●	49.95
2114520	70108	Tracked Vehicle Chassis kit: 2 gear ratios, 58/203:1 & motors: FA-130		57	■	22.95
2114546	70168	Double Gearbox: 1.5V-3V, 4-speed with independent left/right		116	◆	12.95
2146572	VM110N	Control electronics from your computer, 7 inputs and 10 outputs.		Assembled	—	99.95

Forrest M. Mims III Kits and Books

See complete kit descriptions online, additional parts may be required

Part No.	Description	Web Code: FMB	1	5
2155487	Atari Punk Console kit sound synthesizer		\$26.95	\$24.95
2155508	Toy Organ Kit generates nine different tones with volume and pitch. Adjustable with knobs.		39.95	36.95
2155495	The Fridge Alarm kit with Forrest Mims Mini Notebook. Buzzer sounds when fridge light stays on.		19.95	17.95
2155532	The Vibration Sensor kit detects vibrations with a piezo speaker element for high sensitivity		22.95	20.95

Additional products, availability and specifications visit Jameco.com and enter the Web Code in the product search box



Super Snooper Big Ear – Audio Amplifier

What did you say? Learn about the different kinds of amplifiers and how they take small sounds and make big noise. It's based on an LM386 low voltage power amplifier.

- Designed for AM-FM radio amps, portable tape or CD players, intercoms, TV systems or parabolic reflectors.
- Provides 1W, 0.2% THD
- Voltage gain up to 46dB



Part No.	No of Pieces	Experience Level	Price
151204	18	Beginner	\$12.95

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KitPro

Easy LED Color Organ Kit

Light bars are more visually noticeable and add some aesthetics to your music project. Build the PCB kit, pipe in your audio with the 3.5mm jack and tune in to the flash. Choose the customizable circuit if you want to integrate the lighting into a project or want a custom look.



2155541

Part No.	No of Pieces	Experience Level	Price
2155541	68	Beginner	\$39.95
2126272	68	Intermediate	34.95

Club Jameco Kits

JAMECOKitPro

RGB LED Infinity Mirror Projects

Prepare to be mesmerized as you stare down the digital rabbit hole of the Infinity Mirror. The LED lights appear to go on endlessly into the mirror and you can control the colors, effect and speed of it all. The kit includes everything except the mirror, acrylic and 2-way mirror tint, so you can make your own custom mirror. One kit features a shared color RGB strip but color and pattern can be varied with potentiometers. The other kit uses individually addressable RGB LEDs so each diode on the strip can display a unique color. Colors and patterns are run by the Arduino code.



Part No.	Description	Experience Level	Price
2215380	Standard RGB LED strip parts bundle	Intermediate	\$79.95
2215398	Individually addressable LED bundle	Intermediate	79.95

Additional products, availability and specifications visit Jameco.com and enter the Web Code in the product search box

JAMECOKitPro

OWI

Horizon



LED Strobe Light 2205991



Metronome 2168325



groLEDs 2259817



Fun Light Switch Box 2168309

Club Jameco Projects

NEW MARKED IN PINK

Web Code: CJK

Earn with Club Jameco www.ClubJameco.com/Earn

Part No.	Description	Exp. Level	Price
2160817	Super Simple Low Power AM Radio: Building a tunable breadboard AM radio transmitter.	●	\$14.95
2169580	Easy Laser Alarm: Uses a 741 Op-Amp, break the beam and set off the buzzer!	●	19.95
2205991	Portable LED Strobe Light: 30 ultra bright white LEDs is adjustable with a potentiometer.	●	24.95
2168325	Metronome: Speaker, flashing LED, & the ability to switch between different time signature options.	●	29.95
2190080	Vein Finder: This project uses bright red LEDs to shine against skin and highlight your veins!	●	39.95
2192093	DIY Robotic Hand Shadow: Build a robotic hand with servos that mimic your finger movements.	●	99.95
2208702	Guitar to AV Receiver Interface: Features 1/4" audio jack and stereo RCA jacks.	■	19.95
2219461	Laminator Mod-PCB Toner Transfer from a Laser Print: Do toner transfer to copper clad.	■	24.95
2169571	8-Pin Programmer Shield: Program ATtiny series chips using an Arduino as the programmer.	■	24.95
2169109	Water Level Control: Simple electrodes to sense high and low water marks to trigger a relay.	■	24.95
2259817	groLEDs: Computer controllable, adjustable broad spectrum, high brightness grow lamp/light.	■	29.95
2215988	Automatic Water Level Pump Switch: Use copper electrodes as water level sensors.	■	31.95
2170530	Programmable Light Chaser: 32 LEDs run through different animation patterns.	■	24.95
2170812	Pocket Photodiode Geiger Counter: Uses a PIN photodiode as a sub for Geiger-Mueller tubes.	■	32.95
2182661	Triple Power Supply w/ Digital Monitor: Turns unregulated transformer into selectable regulated voltages.	■	34.95
2169467	Magic Morse Code Trainer: Learn to key code, focus on accuracy and rhythm.	■	39.95
2168309	Fun Light Switch Box: Holds different lights, buttons and switches to control the lights.	■	69.95
2160681	DIY Transformer: Wind a step-up or step-down transformer coil from scratch.	◆	34.95
2163962	PropClock Bundle: Parallax Propeller microcontroller drives a persistence of vision effect to display time.	◆	24.95
2170337	Free Charge Controller Development: Open-source kit to collaborate and improve the MPPT controller.	◆	24.95
2190178	PID Temperature Controller: Uses the ATmega328P and Arduino Duemilanove bootloader.	◆	39.95
2168940	8x8x8 Blue LED Cube: Includes 550 3mm blue LEDs. Driven by included Arduino Uno.	◆	149.95
2169539	8x8x8 White LED Cube: Includes 550 3mm white LEDs. Driven by included Arduino Uno.	◆	149.95

JAMECOKitPro

Mini LED Volume Towers Zippy Line Following Robot

Use an LM3916 LED driver to drive up to 20 LEDs (10 per channel) based on the volume of an audio signal. A fun and easy way to add music-responsive visuals. Tower and acrylic not included.



Part No.	No of Pieces	Experience Level	Price
2220517	60	Intermediate	\$39.95

Just add a few common craft items and you can make a line-following cart. Differential drive system steers it left or right to stay over a black line drawn on a white surface. No complicated programming needed!



Part No.	No of Pieces	Experience Level	Price
2170783	34	Beginner	\$29.95

Visit www.Jameco.com/DesignerZone for Club Jameco Kits

● = Beginner ■ = Intermediate ◆ = Expert

Alternative Energy & Workshop Kits



2206002



2112161



2163073



2216606

STEM Alternative Energy Kits

Visit www.Jameco.com/EnergyZone for all alternative energy kits

Part No.	Mfr. Part No.	Description	Web Code: NRG	No. of Pieces	Exp. Level	Price
2112014	OWI-MSK671	Super Solar Racing Car: Uses 1.1V @ 50mA panel.		11	●	\$10.95
2112006	MSK670	Solar Frightened Grasshopper: Eyes jiggle and legs wiggle.		7	●	11.95
2128340	OWI-750	Salt Water Fuel Cell Car: Provides 5-7 hours of continuous play.		20	●	16.95
2097521	MSK610	6-in-1 Educational Solar Kit: Create a car, airboat, windmill & more.		33	●	19.95
2112090	MSK679	Solar System Solar Kit: Build, paint & watch the system come to life.		70	●	21.95
2192333	OWI-MSK615	14-in-1 Educational Solar Robot: Features land and water bots.		40+	●	29.95
2206002	FCJJ-34	Salt Water Fuel Cell: Electric motor w/ fan, wire leads and tubing included.		10	●	69.95
2112161	FCJJ-11	Fuel Cell Car Science: Reversible PEM cell combines electrolysis & power conversion.		10	●	84.95
2112170	FCJJ-16	Solar Hydrogen Kit: Clean energy applications using hydrogen fuel cells.		14	●	85.99
2095007	FCJJ-23	H-Racer 2.0: Smallest hydrogen fuel cell car with remote-control steering.		15	●	109.95
2163090	LWH22-10L-5	Hydrostik Fuel Cartridge: Stores 15Wh of hydrogen energy in a solid-state.		1	■	29.95
2163073	FCHP-02	MiniPak power supply, 2W DC power, includes Hydrostik cartridge.		4	■	129.95
2153861	FCH-010	Hydrofill Refueling Station: Fills the Hydrostik cartridge w/ 99.9% hydrogen.		3	■	349.95

Circuit Skills Web Supported Kits and Projects

Part No.	Description	Web Code: ERK	No. of Pieces	Exp. Level	Price
2121092	Build a guitar effect pedal and learn the basics for perfbord prototyping.		25	●	\$24.95
2126272	Learn the basic functionality of an LED Color Organ ("sound-to-light") circuit.		212	■	34.95
2117202	Build a waveform generator and learn the basics for laying out an enclosure.		44	■	69.95
2113244	Etch your own printed circuit board. 3"x4" pre-coated boards & etch solution. *		4	◆	46.95

*Shipped via ground to continental U.S. only

Jameco Builds DIY Workshop Kit

NEW
MARKED IN PINK

Part No.	Description	Web Code: ERK	No. of Pieces	Exp. Level	Price
2216606	Simple dual jumbo LED Flasher. Adjustable flash rate. PCB solder kit. Mountable, 9V bat. required.		14	●	\$5.95
2217174	Simple dual jumbo LED Flasher. Adjustable flash rate. Breadbrd version, no soldering, 9V bat. req.		14	●	5.95
2223726	Counterfeit Detector UV LEDs. Use to reflect security features in paper currency, checks or ID cards.		25	●	19.95
2155541	LED Color Organ: Mono channel and includes PCB with labels.		35	●	39.95
2192309	Construct a simple DC motor. Classroom pack for 20 students (single kit P/N 2192296)		6	●	99.95
2155516	Build a compact USB charger w/ 5V output to charge small electronic devices.		37	■	16.95
2259286	Parts bundle for LED Solar Lamp. Store daytime energy for evening LED light.		11	■	44.95
2146329	4x4x4 LED Cube: Requires AVR programming for blue LED display visuals.		100	■	79.95

T4 Transforming Solar Robot



Choose to build a walking robot, insect, T-Rex or drill vehicle with this fun and easy to build solderless kit. No batteries; it's powered by the sun! Reuse the parts to build other bots.



Part No.	No of Pieces	Experience Level	Price
2218716	65	Beginner	\$19.95

Salt Water Fuel Cell Motorcycle



Configure the cams and swing arms for straight runs, right or left circling, and radical "S" turns. Activate magnesium strip with a salt water mixture. Safe, non-toxic and clean!

- Runs for 5-7 hours per magnesium sheet



Part No.	No of Pieces	Experience Level	Price
2218708	57	Beginner	\$24.95

Additional products, availability and specifications visit Jameco.com and enter the Web Code in the product search box



JAMECO

KitPro

8x8x8 LED Cube PCB/Shield Kits

Everyone will be mesmerized by its hypnotic effect as LEDs dance in brilliant patterns. An Arduino UNO programs and powers the cube. Kits include two custom PCBs to make building the kit much easier.

Part No.	Cross Ref. No.	Description	Experience Level	Price
2210651	JE888-BLU	Blue LED cube	Intermediate	\$149.95
2210642	JE888-GRN	Green LED cube	Intermediate	149.95
2210669	JE888-WHT	White LED cube	Intermediate	149.95

Visit www.Jameco.com/LightZone for all LED kits and products

Muscle Wire & Solar Products

MONDO•TRONICS Muscle Wire Sample Kits & Project Book

Muscle Wire is thin, highly processed strands of a nickel-titanium alloy called nitinol. It is a shape memory alloy (SMA) that can assume radically different forms at distinct temperatures. Low Temperature (LT) transitions at 70°C (160°F) while the High Temp (HT) variety changes at 90°C (200°F). Explore exciting projects like simple levers and complete motorless walking robots in the project book complete with samples of different wire to complete over 15 projects. The Super Sample kit includes 20cm of five different diameters in both low and high temperature formulations.



Part No.	Mfr. P/N	Description	Price
357659	3-141	Muscle Wire R&D Kit - Project Book and sample wire ...	\$27.95
357641	3-136	Super Sampler: 20cm ea. (.037, .050, 100, 150, 250 µm) ...	35.95

Additional products, availability and specifications visit Jameco.com and enter the Web Code in the product search box

PARALLAX	PowerFilm.	MONDO•TRONICS	ROBOT
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Flexinol® Shape Memory Alloy Actuator Wires

Part No.	Mfr. P/N	Length (meter)	Wire Dia. (microns)	Linear Res. (Ω/m)	Typical Current (mA)	Deform Wt.* (grams)	Recovery Wt.* (grams)	Typical Rate**	Pricing	
									1	5
357595	100HT	1	100	150	180	28	150	43	\$9.95	\$8.95
141874	150LT	1	150	50	400	62	330	20	9.95	8.95
160055	375LT	1	375	8	2750	393	2000	4	12.95	11.49



*Multiply by 0.0098 to get force in Newtons **Cycles per minute, in still air, at 20° Centigrade

1.2V Solar Cell

- 1.2 volts @ 75 mA
- Contact resistance: 35 mΩ max.
- Operating temp.: -40° to 85°F
- 5" stripped/tinned leads attached

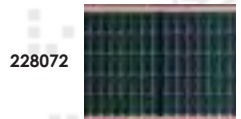


Part No.	Mfr. Part No.	Size (L" x W")	1	5
2210079	FAD-1	1.18 x 0.71	\$3.95	\$3.55

Flexible Thin Film Solar Modules

PowerFilm.

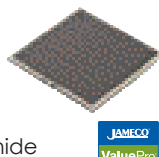
The Wireless Electronics Series offers a new opportunity to solve the old problem of limited power for wireless electronics in portable and remote applications. These modules are lightweight, paper thin and durable.



Part No.	Mfr. Part No.	Operating Voltage	Operating Current (mA)	Size (L x W x T)		Pricing		
				Inches	mm	1	5	25
227985	SP3-37	3.0	22	2.5 x 1.5 x .01	64 x 37 x 0.2	\$3.95	\$3.59	\$3.29
227993	TX3-25	3.0	25	4.5 x 1.0 x .01	114 x 25 x 0.2	3.95	3.59	3.29
171061	MP3-37	3.0	50	4.5 x 1.5 x .01	114 x 37 x 0.2	5.95	5.39	4.79
228030	SP4.2-37	4.2	22	3.3 x 1.5 x .01	84 x 37 x 0.2	5.95	5.39	4.79
228056	MPT4.8-150	4.8	100	3.7 x 5.9 x .01	94 x 150 x 0.2	17.95	15.95	13.95
228064	MPT6-75	6.0	50	4.5 x 3.0 x .01	114 x 75 x 0.2	12.95	11.49	9.95
228072	MPT6-150	6.0	100	4.5 x 5.9 x .01	114 x 150 x 0.2	19.95	17.95	15.95
228101	MPT15-75	15.4	50	10 x 3.0 x .02	253 x 75 x 0.6	24.95	22.49	19.95
228110	MPT15-150	15.4	100	10 x 5.9 x .02	253 x 150 x 0.6	39.95	35.95	31.95

60mm Solar Panel Mini

- Clear coat plastic
- Power output: 0.25W max.
- Volt. output: 4.7VDC to 5VDC
- Size: 2.36"L x 2.36"W x 0.1"Thick
- Material: copper indium diselenide



Part No.	Description	1	5	25
1928142	Solar panel	\$7.95	\$6.95	\$6.25

6V Solar Panel with Alligator Clips

- 6 volt, 150 mA, 0.9 watts
- Polycrystalline cell
- Panel: 3" x 4" x 0.1"
- Pre-soldered 20" alligator clip leads
- Great for small solar projects

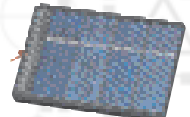


Part No.	Mfr. Part No.	Size (in.)	Price
2260041	GS SOLAR	3 x 4	\$9.95

Mini-Panel Solar Cells

Ready to Use! No Soldering!

Mini-panels are secured in a plastic body with a prismatic cover to help capture all available light. 6" red/black wires attached.



2113666: Solar Cell Grab Bag

- Contains fragile cells of various sizes with 0.5V output
- No leads attached and requires soldering

Part No.	Mfr. Part No.	VDC@mA	Size (L x W)	1	5
2136913	SOL1	0.5 @ 400	2.8" x 1.8" ...	\$5.95	\$5.49
200221	SOL4	2.0 @ 200	3.0" x 3.7" ...	12.95	11.49
215319	4-3.0-100	3.0 @ 100	3.8" x 2.5" ...	12.95	11.49
215327	4-6.0-50	6.0 @ 50	3.8" x 2.5" ...	14.95	13.49
2113666	SC-GRAB	Solar cell grab bag	(min. 40pcs/bag, sizes vary)	9.95	8.95

Visit the Mall of Electronic Kits - www.Jameco.com/KitMall

Wireless Interface Devices & Networking

BASIC Stamp Modules — Enter Web Code BSM



USB BOE-BOT 387997



Distance Sensor 282861



Distance Sensor 2150256



RFID Reader Kit 2007169

BASIC Stamp & Propeller Series – Microcontrollers & Kits

Web Code: MBS

Part No.	Mfr. Part No.	Description	Price
387997	28832	USB BOE-BOT: Reprogrammable robot uses a BASIC Stamp module & is expandable.	\$159.95
387971	27807	BS2 Educational Starter Kit: Includes Board of Education, BASIC Stamp 2 & 40 activities.	159.95
2109165	28803	BASIC Stamp Board of Education: Includes carrier board and BASIC Stamp 2 module.	99.95
2109202	90005	BASIC Stamp Activity Kit: Electronics, programming & components for over 40 activities.	109.95
2191998	32500	ActivityBot teaches programming the multicore Propeller in C. Servo with optical encoders.	229.95

Sensors, Modules and Accessories

Web Code: PXS

2111935	32213	X-band motion detector from 8-30 ft. Frequency: 10.525 GHz with 4-pin SIP interface.	\$39.95
282870	28017	2-axis accelerometer, memsic 2125 ±3g, 6-pin DIP module, analog output for temperature.	39.95
2109667	28526	3-axis accelerometer, MMA7455, SPI or I2C, sensitive select ±2g/±4g/±8g, 2.5 to 5.5 VDC.	39.95
282861	28015	PING Ultrasonic Range/Distance Finder: 0.5" – 10 ft., 5VDC, 3-pin header, positive TTL pulse.	34.95
2109413	570-28015	PING Mounting Bracket kit, to make 180° sweep, includes servo but not Ping Sensor.	34.95
2127081	28380	ColorPAL color/light sensor, detects a full range of colors and outputs data as RGB components.	29.95
2109245	28031	USB to Serial (RS-232) adapter: DB9 male socket, includes USB-A to mini-B cable.	19.95
2109456	28030	USB to Serial (RS-232) adapter: DB9 male & USB mini-B port (cable not included)	19.95
2150256	28995	Sharp IR distance sensor GP2Y0A21YK0F, 10-80cm, 5V operation, 3-pin JST male header, 30mA.	15.95
2082927	555-28027	PIR Sensor kit, single bit high/low output, detection range up to 20 ft., 3 Pin SIP, 3 to 6 VDC.	13.95
2205018	28032R	Wide angle PIR sensor, 180°, range up to 30 ft., 3-6VDC, 4-Pin SIP, 150uA.	14.95
2082855	27800	Modular 2-axis joystick, spring auto return to center, cup-type knob, dual 10k pot w/common ground.	8.95
2109691	350-00014	Infrared receiver, 38kHz carrier frequency found in Boe-Bot and SumoBot kits.	1.25
2109624	28109	Boe-Bot/SumoBot wheel & tire set: 1 wheel & 2 rubber band tires, molded plastic wheel.	5.95
2109763	605-00004	Piezo film vibration sensor: flexible switch, frequency response device, Temp.: 32° to 158°F.	3.95
2129772	GP1UM287RK	56.8kHz infrared detecting unit for remote control (Sharp), anti EMI noise type, compact.	1.49

RFID Read/Write Modules and Tags

Web Code: RAD

2109851	28161	RFID passive tag, blue eye key fob, 125 KHz, readable from 2 to 5", unique 10 digit ID.	\$2.95
2123514	28440	RFID read/write module, serial, 25 KHz RFID transponder tags, 116 bytes of data storage.	59.95
2007169	32390	RFID Reader Kit: Serial card reader, 4 different passive tags, 2400 baud serial interface.	54.95

Wireless Interface Devices

Web Code: WID

2160753	F301-SGP-D024-01	10-position single row female header with 2mm pin spacing, mates w/ XBee chips.	\$.99
2113412	32403	XBee adapter board raw PCB with single row header & sockets, 3.3V pass-thru to XBee module.	6.95
2113421	32400	XBee adapter board with USB interface, PCB mount, 0.1" spacing, includes mounting hole, 5V	34.95
2129326	A000021	XBee/ZigBee Shield for Arduino, communicate wirelessly using ZigBee, based on XBee module	19.95
2113375	32404	XBee PCB antenna Series 1, 1mW, 2.4GHz, 300' line of sight, 802.15.4 network.	29.95
2113391	32406	XBee chip antenna Series 1, 60mW, 2.4GHz, <1 mile range line of sight, 802.15.4.	39.95
2123581	32409	XBee, ZigBee Series 2, 1.25mW, wire antenna, <400 ft. line of sight range, 2.4GHz frequency band.	34.95
2123590	32408	XBee, ZigBee series 2 Pro, 63mW, wire antenna, <2 mile line of sight range.	44.95
2144438	TEL0023	Bluetooth Bee in XBee footprint, 30m max range, 2.4-2.48GHz, 3.3 VDC @ 50mA.	29.95
2159331	TEL0002	USB Bluetooth v2.0 dongle, PC/MAC compatible, 33' range max. upto 3 Mbps.	4.95
2144446	TEL0026	Bluetooth module, 3.5-8V. v2+EDR, 2.4-2.48GHz, 30m max range, sensitivity: less than 84 dBm.	32.95

Visit www.Jameco.com/WirelessZone for all Wireless products

Robotics Shield Kit with Arduino Uno

This beginner friendly, open-platform kit uses an Arduino Uno as the brain of a mobile robot while teaching robotics, electronics, programming and circuit building with step-by-step web lessons.

- Great for hobbyists and classrooms
- Learn to program, calibrate servos, use lights & speakers, build the robot, and use sensors, touch switches and phototransistors to navigate

Includes: BoE Shield PCB, Arduino Uno, USB cable, aluminum chassis, servos, wheels, battery holder and all components for tutorial activities.



Part No.	Mfr. Part No.	Experience Level	Price
2213683	32335	Beginner	\$154.95

Additional products, availability and specifications visit Jameco.com and enter the Web Code in the product search box

Arduino Boards & Accessories

BASIC Stamp 2 Educational Kits

Familiar with electronics but want to learn programming? Learn circuit building and programming at the same time. Build simple circuits with schematics and wiring diagrams, and write programs in PBASIC to control your circuit. HomeWork Board with built-in Basic Stamp 2 microcontroller included.

Part No.	Mfr. P/N	Description	Price
2109202	90005	BASIC Stamp 2 Activity Kit – USB Version	\$109.95
2109165	28803	BASIC Stamp 2 Board of Education w/ USB cable & BS2 ..	99.95
387971	27807	BASIC Stamp 2 Discovery Kit w/ components	159.95



2109202

Additional products, availability and specifications visit Jameco.com and enter the Web Code in the product search box

Visit www.Jameco.com/ArduinoZone for all Arduino Products



Ethernet Module 2124322



Arduino Yún 2193441



Prototyping Shield 2159277



Screw Shield 2144534

Embedded Networking Solutions

Web Code: WHZ

Part No.	Mfr. Part No.	Description	Price
2189636	APRIL	Electric Imp Breakout Board: Use w/ WiFi card (below) 3.3V input with mini-USB connector.	\$13.95
2189610	IMP001-US-R-ENG	Electric Imp WiFi module Im Card: ~70kB RAM, 6 I/Os, (2) I ² C channels, 32-bit Cortex M3 processor.	29.95
2124322	WIZ110SR	Serial to ethernet module, 10/100Mbps Ethernet max 230Kbps serial. DB9 interface. W5100 TCP/IP chip.	32.95

Microcontroller Boards

Web Code: ARD

Part No.	Manufacturer	Mfr. Part No.	Description	Pricing	
				1	5
2151259	KitPro	BB-Arduino	Build an Arduino-compatible circuit with Atmega328P.	\$12.95	\$11.95
2115768	Solarbotics	KARDW	Ardweeny microcontroller kit, Atmega328, 7+ pieces.	14.95	13.49
2157765	DFRobot	DFR0159	DFRduino Pro Mini V1.2 MCU board with 16MHz ATmega328.	19.95	17.95
2184261	Adafruit	659	FLORA Arduino-compatible wearable electronic platform. 3.5-16VDC.	29.95	26.95
2151486	Arduino	A000066	Uno Rev. 3, ATmega328 (DIP), 14 digital I/O, 6 analog I/O, 32K flash.	29.95	27.95
2163778	Arduino	A000057	Leonardo with headers, 20 digital I/Os, 7 PWM channels, 32k flash.	34.95	31.95
2163840	Arduino	A000073	Uno SMD Rev. 3, with ATmega16U2 USB-Serial converter & 1.0 pinout.	32.95	29.95
2170222	Arduino	A000062	Due w/ 32-bit ARM core MCU, 54 digital I/Os, 12 analog inputs, 4 UARTs, 84MHz clock, 512kB flash.	54.95	49.95
2121148	Arduino	A000005	Nano v3.1, ATmega328, 14 digital I/O (6 PWM), 8 analog input, 0.6" wide breadboard. Built-in USB mini-B interface	44.95	39.95
2173706	DFRobot	DFR0225	Romeo v2. Integrated Uno and 2-way DC 2A motor driver and XBee socket.	44.95	39.95
2152366	Arduino	A000067	Mega2560 Rev. 3, 54 digital I/O (14 PWM), 16 analog input, 256K flash.	43.95	39.95
2170767	Secret Labs	Netduino Plus 2	32-bit MCU w/ 22 GPIOs w/ SPI, I ² C, 4 UARTs (1 RTS/CTS), 6 PWM channels.	69.95	62.95
2193441	Arduino	A000008	Yún. Built in Ethernet & WiFi, µSD slot, 20 digital I/O. AR9331, runs Linux.	84.95	76.95
2121121	KitPro	KIT-GSA	Get Started with Arduino kit, includes Uno, breadboard, LEDs, switches.	69.95	62.95
2171188	Arduino	K000007	Arduino Starter kit includes Uno Rev. 3, components & project book.	119.95	109.95
2193467	Arduino	A001078	Dual board robot on wheels, compass, sensors, card reader & display.	279.95	259.95

Shields for Arduino (Arduino sold separately)

Web Code: AOS

Part No.	Manufacturer	Mfr. Part No.	Description	Pricing	
				1	5
2152438	Arduino	A000082	Arduino Prototyping Shield PCB Rev. 3, compatible Arduino R3 pinout.	\$5.95	\$5.39
2159277	DFRobot	DFR0019	Prototyping shield w/mini breadboard. SOIC-14 pad, ICSP header.	12.95	11.49
2152446	Arduino	A000083	Arduino Proto Shield Rev. 3, pushbuttons, LEDs and resistors.	12.95	11.95
2152391	Arduino	A000077	Arduino Proto Shield Rev. 3, ICSP connector, pass-through headers.	21.95	19.95
2152411	Arduino	A000080	MEGA Rev. 3 Protoshield printed circuit board for protoshield kit.	6.95	6.25
2152420	Arduino	A000081	MEGA Rev. 3 Protoshield kit, multilayer PCB design w/prototyping areas.	14.95	13.49
2144534	DFRobot	DFR0060	Screw Shield for Arduino, convert female header pins to screw terminals.	9.95	8.95
2159314	DFRobot	DFR0131	Proto Screw Shield (assembled), prototyping area and screw terminals for secure I/O connections.	16.95	14.95

Visit the Mall of Electronic Kits – www.Jameco.com/KitMall

Arduino Shields & Accessories



Relay Shield 2152260



Megamoto+ Shield 2204023



Education Shield 2153781



Color Sensor 2159373

Shields for Arduino (Arduino sold separately) – Continued

Web Code: AOS

Part No.	Manufacturer	Mfr. Part No.	Description	Pricing	
				1	5
2127582	Liquidware	DoubleWide	Replicate all Arduino pins into 2 locations to add 2 shields while having access to both at the same time.	\$24.95	\$22.49
2184202	Adafruit	1141	Data Logging Shield. Built in RTC & µSD slot, 3.3V regulator.	24.95	22.49
2140402	Arduino	A000064	Wireless Proto Shield w/ XBee communication, 100' inside/300' outside.	22.95	20.95
2152260	DFRobot	DFR0144	Relay Shield control 4 relays. Controllable w/Arduino, Xbee or Bluetooth.	21.95	19.95
2167744	DFRobot	DFR0071	SD Card Breakout Shield for standard SD and microSD cards.	12.95	11.95
2144411	DFRobot	DFR0009	16 x2 LCD Shield, HD44780 compatible. White text, blue backlight, uses LCD4Bit library, integrates a 5 DOF joystick.	16.95	14.95
2157781	DFRobot	DFR0008	Input shield w/ 2-axis push button joystick, push buttons, BT/Xbee headers.	16.95	15.95
2193651	Adafruit	1438	Motor/Stepper/Servo Shield v2.0. Supports 4 DC or 2 stepper motors.	24.95	22.49
2152403	Arduino	A000079	Arduino MotorShield Rev. 3. Dual full-bridge for inductive loads, 2A.	34.95	32.95
2128534	Robot Power	MEGAMOTO	Hi-pwr. Motor Shield, 5-28V, H-bridge/dual half-bridge. 13A/30A surge.	49.95	47.95
2204023	Robot Power	MEGAMOTO	Megamoto+ High-power Motor Shield, 5-28V, H-bridge/dual half-bridge. 20A/40A surge	59.95	56.95
2157829	DFRobot	DRI0009	2-Amp Motor Shield. Drive 7-12VDC motors w/ 2A max. current each way.	19.95	17.95
2163786	Arduino	A000058	WiFi Shield connects Arduino to the internet wirelessly. 802.11b/g	119.95	109.95
2153781	Parallax	35000	Board of Education Shield works with Uno & Mega prototyping.	34.95	31.95
2184211	Adafruit	1272	Ultimate GPS Logger Shield with GPS module. -165dBm, 66-CH, RTC.	59.95	53.95
2167779	DFRobot	TEL0051	GPS/GPRS/GSM Module v2. 4-band, AT-commands, 6-9VDC@0.1A	109.95	99.95

Sensors, Accessories & Miscellaneous Kits

Web Code: AOA

2137756	Arduino	A000040	Header kit for shields 2X: 1x6 pos & 1x8 pos, 15mm pin len., 0.1" spacing.	\$1.95	\$1.75
2152180	DFRobot	DFR0062	Wii Adapter, Arduino-compatible. Inserts into Wii nunchuck controller. Allows access to 2-axis joystick, 2 buttons & 3-axis ±2g accelerometer.	3.95	3.59
2159453	DFRobot	DFR0028	Digital tilt switch sensor, 3-pin connection: output, power, ground, 5VDC.	4.95	4.49
2159381	DFRobot	SEN0114	Soil moisture sensor, reads moisture present, includes sensor cable.	6.95	6.25
2159445	DFRobot	DFR0034	Analog sound sensor, detects sound intensity, 5VDC.	8.95	7.95
2159373	DFRobot	SEN0101	Sensor w/RGB sensor chip & 4 white LEDs. Digital TTL interface, 2.7-5.5V.	10.95	9.95
2157845	DFRobot	DFR0077	RS-232 to TTL converter, 5V, GND, logic in (SRX), logic out (STX).	10.95	9.95
2144454	DFRobot	DFR0017	Arduino compatible relay module. 150VAC/24VDC switching voltage.	10.95	9.95
2152315	DFRobot	DFR0107	Arduino-compatible IR remote and receiver kit, cable & sample code.	10.95	9.95

Bluetooth 4.0 Low Energy Shield v2.1

Add Bluetooth LE connectivity to any Arduino compatible board.

- Uses nRF8001 BLE controller chip
- Supports iOS 7 (iPhone 4S/5/6, iPad 3/4/mini/Air), Android 4.3+ (Nexus 4/5/7, Samsung Note 3 and more)
- Use IDE v1.6.4 or later



BLUNO - Arduino Uno with BT 4.0

An Arduino Uno with integrated Bluetooth 4.0 BLE! Uses TI CC2540 BT 4.0 chip

- Allows wireless programming via BLE
- Supports BT HID and AT commands
- Supports Android and iOS 7



Part No.	Mfr. Part No.	Size (in.)	Price	Part No.	Mfr. Part No.	Size (in.)	Price
2217465	103990055	2.5 x 2.1	\$34.95	2213245	DFR0267	2.36 x 2.09	\$49.95

Visit www.Jameco.com/ArduinoZone for all Arduino kits and products

Dual Motor Driver Shield Kits for Arduino

Web Code: VBA

Build a shield that makes it easy to connect one or two DC motors to your Arduino or compatible microcontroller. They support a wide voltage range from 5.5V to 24V. MCU not included. Assembly required and heat sink recommended. • 2.5V/5V logic compatible

2223902: MC33926, 3A continuous/5A peak per motor

2223911: VN15019, 12A continuous/30A max per motor

NEW
MARKED IN PINK

Part No.	Mfr. Part No.	Description	Size (in.)	Price
2223902	2503	Dual motor driver kit	1.90 x 2.02	\$29.95
2223911	2507	High-power dual motor driver kit	2.56 x 2.02	49.95



Pololu
Robotics & Electronics

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Arduino Sensors & Accessories

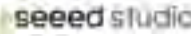
Arduino Starter Kits

Web Code: SKS

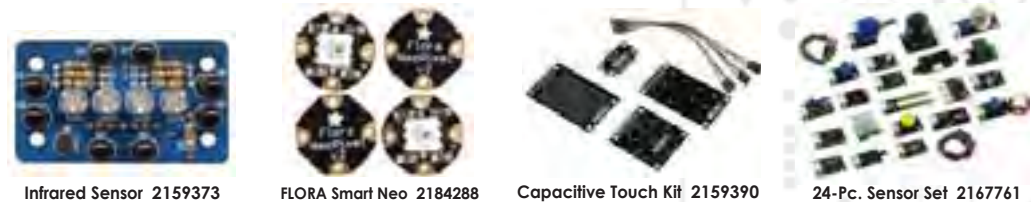
Need input? Dive in to the exciting world of Arduino microcontrollers with a starter kit designed to teach electronics basics covering LEDs, button switches, motors, sensors and more. You'll also learn programming and circuit building while making several fun projects. You'll be designing your own gadgets in no time.

Part No.	Mfr. P/N	Description	Price
2171188	K000007	Authentic Arduino Starter kit from Arduino	\$119.95
2212007	170	ARDX v1.3 Experimentation Kit from Adafruit	99.95
2121121	KIT-GSA	Basic Arduino Starter kit from Jameco	69.95
2217473	KIT11021P	Grove Starter Kit Plus: Base shield & 15 modules	59.95
2213261	DFR0100	Beginner Kit for Arduino from DFRobot	54.95

Visit www.Jameco.com/ArduinoZone for all Arduino kits and products



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Infrared Sensor 2159373

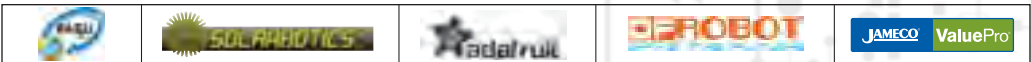
FLORA Smart Neo 2184288

Capacitive Touch Kit 2159390

24-Pc. Sensor Set 2167761

Sensors, Accessories & Miscellaneous Kits

Part No.	Manufacturer	Mfr. Part No.	Description	Web Code: AOA		Pricing	
						1	5
2150441	Dagu	RS002A	Compound infrared sensor used as a range finder or movement tracker within 200mm, 4 pairs of IR phototransistors and 4 IR LEDs.			\$8.95	\$7.95
2144462	DFRobot	SEN0019	Adjustable infrared sensor switch, 3-80cm range, 5V@100mA. 18" cable.			10.95	9.95
2184288	Adafruit	1260	FLORA RGB Smart Neo Pixel v2. 24-bit, 5-9VDC, chainable, 18mA.			11.95	10.95
2152251	DFRobot	DFR0106	Light disk w/ 7 SMD RGB LEDs. 5V operation, 4-pin header, 6000mcd.			12.95	11.49
2134926	Arduino	A000009	ABS plastic enclosure for Uno-Duemilanove-Diecimila-NG or MEGA.			12.95	11.95
2134993	ValuePro	PROTO KIT	830-contact breadboard & 70-piece jumper wire kit for prototyping.			14.95	13.49
2152340	Arduino	A000059	USB to 5V serial adapter board, includes pins for RX, TX, 5V, ground & reset.			16.95	14.95
2152243	DFRobot	DFR0065	FTDI basic breakout board for USB to serial communication. Uses DTR pin for hardware auto-reset when a new sketch is downloaded.			17.95	15.95
2159461	DFRobot	DFR0143	3-axis accelerometer, selectable sensitivity, low pass filter, analog output.			19.95	17.95
2159496	DFRobot	DFR0126	Digital audio analyzer w/ graphic equalizer display filter giving your Arduino ears. Can be read in 7 different frequency bands.			24.95	22.49
2117341	Solarbotics	50512	Breakout board, 3.3/5V, FTDI mini USB-B to serial 6-pin, works with Arduino & clone 5V Arduino boards can use as a USB port, FT232RL chip.			22.95	19.95
2150521	Dagu	RS003HP	Wild Thumper high power switch for circuit protection. 6-20 battery.			19.95	17.95
2159402	DFRobot	DFR0066	Humidity/temperature sensor w/ SHT1x sensor, precision humidity chamber.			24.95	22.49
2159251	DFRobot	DFR0141	Light disc, 12 SMD RGB LEDs. Individual color/brightness configurable.			24.95	22.49
2159390	DFRobot	DFR0129	Capacitive touch kit, iPod-style wheel, keypad and grid touch pad.			24.95	22.95
2144665	PowerSwitchTail	80135	Power cord switch control outlet with microcontroller, 15A @ 125VAC, 5V.			29.95	26.95
2144489	ValuePro	2601510235340Z	Conductive sewing thread. Size 92, 234/34. Perfect for wearables.			39.95	35.95
2144500	DFRobot	DFR0018	Analog sensors for Arduino. LED light module, ambient light, capacitive touch, temperature, magnetic, vibration, tilt, and grayscale sensor.			44.95	39.95
2157757	DFRobot	KIT0003	Auto-watering kit w/ control board, temp/humidity, moisture sensor, water tube, pump, mini USB cable, DC adapter and enclosure.			69.95	62.95
2167761	DFRobot	KIT0011	24-pc. advanced sensor set: light, gas, sound, touch & accelerometer.			89.95	80.95
2183859	EarthLCD	ARLCD	3.5" Color TFT Touchscreen, Arduino-compatible, 16-bit GPU, 320x240px.			109.95	99.95



Arduino Uno with 3.5" Touchscreen

A full-featured Arduino Uno R3 with 320 x 240 65k color LCD mounted to the back so it's still shield-ready.

- Resistive touchscreen
- 3.5" RGB color TFT with LED backlight
- 4MB Flash for storing fonts and bitmaps
- 16-bit processor, 256K Graphics library storage

Web Codes: QAW, GCG

Part No.	Mfr. Part No.	Size (in.)	Price
2183859	ARLCD	3 x 3 x 0.9	\$109.95



More Sensors!

Ultrasonic Distance

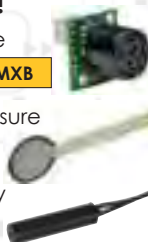
Web Codes: CAU, MXB

Flexible Force/Pressure

Web Code: EVS

Magnetic Proximity

Web Code: CCC



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Comprehensive Electronic Component Bundles

These bundles contain a variety of standard or commonly used electronics components. Deluxe Pack 1 contains photoresistors, fuses, pushbutton and toggle switches, relays, LEDs, transistors, capacitors, resistors, potentiometers, 22AWG hook-up wire, alligator jumpers, battery holders and batteries. Deluxe Pack 2 contains 74LS/74HC logic ICs and sockets, relays, voltage regulators, tactile and reed switches, 555 timer, diodes, binding posts, DC power connectors, heat shrink tubing, protoboards, project box, 3rd hand, IC insert/extract tool, anti-static wriststrap and lead-free solder.



Part No.	Description	Price
2129115	Deluxe pack 1 - passive component bundle, 200+ pcs.	\$89.95
2129123	Deluxe pack 2 - logic component bundle, 100+ pcs.	99.95



Over 100 Grab Bags & Assortments available online. Use Web Code: GBS, CKS

Raspberry Pi Bundles & Accessories

The powerful Linux-based Raspberry Pi enables you to explore computing and learn how to program in Scratch and Python; just add a keyboard, mouse and monitor/TV. You can browse the internet, do spreadsheets and word processing, watch video and play games, or you can integrate sensors to interact with your environment.



2223523



Part No.	Description	Price
2223777	Raspberry Pi 2 Model B Starter Bundle with Pi 2 B and more, see Web.	\$79.95
2223890	Quick Starter: 8GB µSD w/ OS, power supply and more, see Web.*	\$9.95
2158944	Cable bundle: 7' Ethernet, 6' RCA, 2m HDMI, 3.5mm/RCA*	9.95
2223523	Raspberry Pi 2 Model B w/ Quad Core BCM2836 CPU, 1GB RAM, 4x USB ..	49.95

* Raspberry Pi computer sold separately

10 more Raspberry Pi products available online. Use Web Code: RPI



DIY Spider Robot

Build an eight-legged robot that closely duplicates the walking movements of a real spider with two choices for the stride length and gate. The translucent blue plastic allows you to see the inner workings of the bot. Add a microcontroller and distance sensor for a smarter and more powerful robot that can automatically avoid barriers.



2190717

Part No.	Mfr. Part No.	Description	No. of Pieces	Exp. Level	Price
2190717	ROB0103	DIY Spider bot	70	Beginner	\$8.95
2173706	DFR0225	RoMeo MCU	1	Beginner	44.95
2150256	GP2Y0A21	IR distance sensor	1	Beginner	15.95

Over 150 products available online. Use Web Code: ERK



2-in-1 Hexapod/Mini Biped Robot Kit



Build an IR remote controlled hexabot or a mini two-legged robot with this great kit designed for beginners and younger students. They'll learn the basic skills needed for making and programming robots. It includes an Arduino-compatible USB interface, infrared compound eye for detecting objects and a universal remote for controlling your new bot.

Part No.	Mfr. Part No.	No. of Pieces	Exp. Level	Price
2150619	RS014-USB	22	Beginner	\$59.95

Over 130 Arduino related products available online. Use Web Code: ARR

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The Most Electronic Kits in One Place



Robotic Arm Edge Kit

Build a gripper that can open and close with 120° wrist motion, a lengthy elbow range of 300°, 270° of base rotation and 180° of base motion. It has a vertical reach of 15", horizontal reach of 12.6" and can lift up to 100g. All motion is controlled from a wired controller, or add the USB interface and control the movements from your Windows PC.



2095023

Part No. Mfr. Part No. Description

Price

2095023	OWI-535	Robotic Arm Edge Kit, 87 pieces,	\$49.95
2111960	535-USB	USB Interface for Robotic Arm	39.95

Over 150 Robotic & Electronic Kits available online. Use Web Code: ERK



Arduino Kits and Sensor Modules



Arduino-compatible boards and products make it easy to create your own innovative projects. Build an autonomously operating robot and learn how sensors are used to change the robots navigation behavior.



2259032



2259032

Part No. Mfr. Part No. Description

Price

2259032	ROB-01	101 Robotics Basics Kit	\$149.95
2258961	ARP-02	201 Arduino Basics Starter Kit	99.95
2259024	SCSHD-01	Motor & Servo shield	19.95
2259008	PROTO-01	Proto shield, 13x16 0.1" grid	8.95
2258996	IRFOL-01	IR Follower, 6 diodes, emit/detect	8.95
2258970	FAN-01	Fan Motor module, speed/direction control	8.95
2258988	FLAME-01	Flame Sensor, 760-1100nm, 5V	7.95
2259016	REED-01	Reed Switch Sensor module, SPST, 10W	5.95

More OSEPP products available online. Use Web Code: SBG



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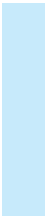
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